

HEALTH INFORMATION MANAGEMENT TECHNOLOGY (HIMT)

HIMT 301 | Digital Literacy in Healthcare | 3 cr

This course provides an overview of medical clinical workflow, with emphasis on inter-professional electronic documentation and functionalities of the electronic health record (EHR). Through hands-on experience, this course advances the students' understanding of the electronic health record, Health IT Policies, Data and Database Management Systems in support of the EHR. (Students admitted to the HIMT program, having completed at least 60 credits, are eligible to enroll in HIMT 301.)

Prerequisites: Admitted to Health Information Management and Technology; completion of 60 credits.

Offered: Fall, Spring, Summer.

HIMT 310 | Healthcare Systems and Organizations | 3 cr

Examines how healthcare and public health are organized and how their services are delivered in the United States (US). Topics to be covered include: public policy (including US health reform initiatives); organization of healthcare systems; components and operation of healthcare organizations including e-health delivery; professional roles and accreditation; legal and regulatory issues including licensure requirements.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 320 | Survey of Information Technology in Healthcare | 3 cr

Essential healthcare information technologies (HIT) that are used for healthcare information systems (HISs) are examined. Popular HISs include electronic medical record systems (EMRS), the computerized provider order entry systems, telemedicine, telehealth and e-prescribing.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 330 | Healthcare I: Terminology and Body Systems | 3 cr

Examines specific terminology and vocabulary used by workers in healthcare and public health. Topics include medical terminology that broadly relates to human anatomy and physiology, body systems and diagnosis, including prefixes, suffixes, roots and combined forms. Topics will also include healthcare taxonomies and nomenclatures (e.g. ICD-9-CM, ICD-10, etc.)

Prerequisites: UW Colleges BIO 101 or equivalent.

Offered: Fall, Spring, Summer.

HIMT 340 | Ethical Issues, Security Management and Compliance | 3 cr

Examines three broad subjects: 1) evidence-based medical ethics pertaining to healthcare information management; 2) framework of healthcare information security management including security principles, policies and procedures, security management models, risk assessment, and protection mechanisms; 3) healthcare regulations and compliance with focuses on the legislative systems, policies, and legal environment of healthcare in the U.S.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 345 | Programming and Software Development | 3 cr

Introduction to: object-oriented (OO) programming paradigm, object-oriented systems analysis and design, fundamental data structures, and n-tier software design. Examination of the role of each in the software development process.

Prerequisites: HIMT 300.

Offered: Fall, Spring, Summer.

HIMT 350 | Statistics For Healthcare | 3 cr

Examines basic statistical methods for the health sciences with emphasis on the principles of statistical reasoning, underlying assumptions, hypothesis testing, and careful interpretation of results. Some topics covered: major study designs, descriptive statistics, graphical displays of data, probability, confidence intervals and tests for means, differences of means, sample size and power, differences of proportions, chi-square tests for categorical variables, regression, multiple regression, and non-parametric statistics.

Prerequisites: UW Colleges MAT 105 or equivalent.

Offered: Fall, Spring, Summer.

HIMT 355 | Principles of Management For HIMT Professionals | 3 cr

Provides an overview of basic principles involved in management and communication. Topics include basic management principles, communication skills, interpersonal communication competence, negotiation technique, team/consensus building, professional development, and problem solving/decision-making processes.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 360 | Healthcare II: Survey of Disease & Treatments | 3 cr

Further investigates the topics covered in HIMT 330. Topics include human disease, human health issues and classification of disease/health issues. Diagnostics, treatments and clinical procedures that are currently in practice will be discussed. Other topics will include how the drugs and biologicals work, their limitations, and the current diversity of available drugs and biologicals.

Prerequisites: HIMT 330.

Offered: Fall, Spring, Summer.

HIMT 365 | Healthcare Economics | 3 cr

Applications of microeconomic theory to analyze the behavior of health and health care markets. Topics will include: supply and demand of health care services, private health insurance markets, government provision of health care services and health insurance, and health care policy.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 370 | Healthcare Systems: Analysis and Design | 3 cr

The first course in a two-course sequence that addresses methods and techniques of healthcare information system (IS) analysis and design as performed within the system development life cycle. Included will be techniques for problem definition, requirements gathering, analysis, logical design, selection and evaluation of alternative healthcare information systems solutions from the point of view of the health provider and user. An emphasis is placed on analysis, selection, and evaluation of information systems as they relate to healthcare.

Prerequisites: HIMT 300.

Offered: Fall, Spring, Summer.

HIMT 375 | Database Structures and Management Systems | 3 cr

Analyze and design databases to support computer-based information systems. Develop and implement relational database management systems using SQL. Topics include: data modeling techniques such as entity-relationship modeling, extended entity-relationship modeling, database constraints, database normalization techniques, and basic and advanced features of database query language SQL, etc.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 380 | Healthcare Billing, Coding, and Reimbursement | 3 cr

This course examines the coding and reimbursement connection; topics include managed care plans, prospective payment systems, Medicare-Medicaid reimbursement, resource-based Relative Value Scale, case mix management, and revenue cycle management.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 399 | Special Topics in Health Information Management and Technology | 3 cr

Examines a specific topic within Health Information Technology for seminar or independent study.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 400 | Healthcare Information and Technology - Data | 3 cr

Explores the sources and data contents of healthcare information as well as the proper presentation of it for different usage levels. Topics addressed include: 1) data structure and use of health information (individual, comparative and aggregate), 2) type and content of health record, 3) data quality assessment, 4) secondary data sources, 5) healthcare data sets, 6) Health information archival systems, and 7) National Health care Information Infrastructure (NHII). This course will also cover topics in bioinformatics.

Prerequisites: HIMT 360.

Offered: Fall, Spring, Summer.

HIMT 410 | Healthcare Systems: Implementation and Integration | 3 cr

Examines the back-end stages of healthcare systems development lifecycle through the development of technical design specifications, procurement procedures (RFP, RFQ, vendor evaluation and selection, and contracting), systems configuration and integration, installation, conversion, operation, and maintenance. Pre-installation testing and post-conversion auditing and monitoring will be emphasized to address the upcoming requirements of federal certification of EHR systems.

Prerequisites: HIMT 300 and HIMT 370.

Offered: Fall, Spring, Summer.

HIMT 415 | Human Resource Management in Healthcare | 3 cr

Examines the role of Health Information Management staff in managing human resources to facilitate staff recruitment, training, retention and supervision. Emphasis includes ensuring compliance with employment laws and evaluating staff performances.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 420 | Healthcare Systems: Project Management | 3 cr

This course addresses the phenomenal impact information system (IS) projects have had on healthcare delivery. Students learn how healthcare IS projects affect organizations, doctors, patients, and chronic-illness treatments, as well as individuals interested in managing their own healthcare. Concepts and tools for effective healthcare IS project management, process re-engineering and work redesign are introduced. The purpose of this course is to expose students to IS project management activities in healthcare settings. Topics covered include recent healthcare IS project trends, budgeting, scheduling, resource management, scope, risk analysis, and deployment controls. The genesis of healthcare project management is covered using specific cases and examples.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 425 | Data Warehousing and Mining | 3 cr

Examines the concept of data warehouse and its effectiveness in supporting strategic decision making. Address the process of creating data warehouse/data-mart solutions from the identification of the enterprise informational and analytical needs to producing business intelligence by extraction information from the data warehouse by using data mining methods and models.

Prerequisites: HIMT 375.

Offered: Fall, Spring, Summer.

HIMT 430 | Quality Assessment and Improvement | 3 cr

Examines the Quality Assessment and Quality Improvement cycle (Plan, Do, Act, Check) and the role of the Health Information Technology and Health Information Management in the process. Tools used in quality and risk management processes will be examined.

Prerequisites: HIMT 350.

Offered: Fall, Spring, Summer.

HIMT 435 | Data Communications and Computer Networks in Healthcare | 3 cr

Provides fundamentals of data communications and networking techniques, and examines the linkage of information technology strategies and technological solutions enabling effective communication within and between healthcare organizations. Major topics include fundamental concepts of data communications and applications, network communication devices, basic technologies of the Local Area Network, Wireless Local Area Network, Wide Area Network, Internet and the Web, the OSI stack, healthcare information systems standards, and the HIE, RHIN, and the NHIN.

Prerequisites: HIMT 300.

Offered: Fall, Spring, Summer.

HIMT 440 | Group Processes, Team Building and Leadership | 3 cr

Examine the necessary group/team processes that are at the root of building, developing, and maintaining medical/healthcare work teams and the effective functioning of such teams. The course also provides an overview of leadership development techniques and explores the uses of various communication technologies in the team building and functioning process.

Prerequisites: HIMT 355.

Offered: Fall, Spring, Summer.

HIMT 445 | Application of Leadership and Management in Healthcare Technology | 3 cr

This course assimilates and integrates concepts and applications of management and leadership in the healthcare advancing on the topics covered in HIMT 355, 365 and 415. Topics will include strategic leadership concepts, exploring key factors that impact management and planning, change management, critical organizational behaviors for leadership and management focusing on best practices and organizational accountability and assessment models.

Prerequisites: HIMT 355, HIMT 365, HIMT 415.

Offered: Fall, Spring, Summer.

HIMT 450 | Healthcare Information and Technology- Standards | 3 cr

Introduces healthcare information technology standards including standards and regulations for documentation, and will cover health information standards. Investigates soft-ware applications and enterprise architecture in healthcare and public organizations.

Prerequisites: HIMT 400.

Offered: Fall, Spring, Summer.

HIMT 489 | Pre-Capstone: Health Information Management and Technology | 1 cr

This is a one-credit course that is intended to serve as an orientation for the HIMT 490 Capstone course and includes content related to the national accrediting exams for Health Information Management and Health Information Technology certifications, resume development, and professional development to assist students in their upcoming capstone experience.

Prerequisites: None.

Offered: Fall, Spring, Summer.

HIMT 490 | Capstone Project | 3 cr

Explores the theory and dynamics of interprofessional and team practice in health information management and technology with the context of projects undertaken in healthcare settings. Work may involve all phases of project development. Project set-up will be jointly done by the student, site sponsor, and the course faculty.

Prerequisites: HIMT 400.

Offered: Fall, Spring, Summer.